Japan Agency for Medical Research and Development (AMED); Its Missions and Challenges

Round Table Meeting
Health, Care and Welfare Technology
June 7th, 2018

Japan Agency for Medical Research and Development (AMED)
Department of International Affairs
Yasutake KATOH
Japan’s medical R&D system

Headquarters for Healthcare Policy (HHP)
- Established in 2013, headed by the Prime Minister
- Develop the Plan for Promotion of Medical Research and Development in 2014

- Propose executive personnel
- Propose mid to long term targets
- Coordinate the budget allocation

Cabinet Office

Ministry of Education, Culture, Sports, Science and Technology (MEXT)

Ministry of Health, Labour and Welfare (MLHW)

Ministry of Economy, Trade and Industry (METI)

Determine mid- to long-term targets, operational management and allocate operating budget

Japan Agency for Medical Research and Development (AMED) Established on 1st April 2015

Funding

Research Institutes (Universities and Hospitals)
Funding Agencies in Japan related to Science and Technologies

Provides frameworks of policy and supervise each ministry

Cabinet Office

Ministry of Finance

Funding

MEXT

METI

JST

JSPS (Japan Society for the Promotion of Science)

NEDO (New Energy and Industrial Technology Development Organization)

MHLW

universities

universities, hospitals, and industries

universities, hospitals, and industries

Bottom-up Approach

Bottom-up Approach

Top-down Approach
Our goal is to fast-track medical R&D that directly benefits people not only by extending lifespans but also by improving quality of life: supporting “life” as biological existence, daily living, and lifespans.

A success of AMED highly depends on alliance and cooperativity of three ministries (METI, MEXT, MHLW).

To this end, we need to challenge for an art of probability........

Not only budgets but also officers and scientists with new mindsets…...
Organization of AMED

as of April 1, 2018

Staff: 371
(Except temporary workers)
(532 in total)

as of Jan 2018

Staff comes from
◆ relevant ministries
◆ other funding agencies
◆ universities
◆ research institutes
◆ pharmaceutical companies
◆ medical device companies

Executive Director

President

Council of Research and Management

Advisory Board

Office of Audit

Department of Planning and Management

Department of General Affairs

Department of Financial Affairs

Department of Research Integrity and Legal Affairs

Department of Intellectual Property

Department of Research Promotion

Department of Industrial-Academic Collaboration

Department of International Affairs

Department of Research Infrastructure

Department of Clinical Research and Trials

Department of Innovative Drug Discovery and Development

Department of Cyclic Innovation

Auditor

Management Section

Support Section

Project Section

Office of Audit

Department of Planning and Management

Department of General Affairs

Department of Financial Affairs

Department of Research Integrity and Legal Affairs

Department of Intellectual Property

Department of Research Promotion

Department of Industrial-Academic Collaboration

Department of International Affairs

Department of Research Infrastructure

Department of Clinical Research and Trials

Department of Innovative Drug Discovery and Development

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9 Interrelated Projects

1. Drug discovery
2. Medical devices
3. Translational and Clinical Research Core Centres
4. Regenerative medicine
5. Genomic medicine
6. Cancer
7. Psychiatric and neurological disorders (brain research)
8. Emerging and re-emerging infectious diseases
9. Rare and Intractable Diseases
## Annual budget in FY 2018

<table>
<thead>
<tr>
<th>Category</th>
<th>Budget (€)</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Drug Discovery</td>
<td>€ 161 M</td>
<td>17.3%</td>
</tr>
<tr>
<td>2. Medical Devices</td>
<td>€ 90 M</td>
<td>9.7%</td>
</tr>
<tr>
<td>3. Translational and Clinical Research Core Centres</td>
<td>€ 66 M</td>
<td>7.1%</td>
</tr>
<tr>
<td>4. Regenerative Medicine</td>
<td>€ 118 M</td>
<td>12.7%</td>
</tr>
<tr>
<td>5. Genomic Medicine</td>
<td>€ 53 M</td>
<td>5.7%</td>
</tr>
<tr>
<td>6. Cancer</td>
<td>€ 92 M</td>
<td>10.0%</td>
</tr>
<tr>
<td>7. Psychiatric and Neurological Disorders</td>
<td>€ 54 M</td>
<td>5.9%</td>
</tr>
<tr>
<td>8. Emerging and Re-emerging Infectious Diseases</td>
<td>€ 39 M</td>
<td>4.2%</td>
</tr>
<tr>
<td>9. Rare and Intractable Diseases</td>
<td>€ 63 M</td>
<td>6.8%</td>
</tr>
<tr>
<td>10. Other Programs</td>
<td>€ 191 M</td>
<td>20.6%</td>
</tr>
</tbody>
</table>

**Budget Bill** € 1.0 Billion

(MEXT: 0.47, MHLW: 0.36, METI: 0.14)

(1 EURO = 130 JPY)
The number of projects supported by AMED

Awarded Projects

- Medicine & Device Development Projects: 1000
- Projects to Elucidate Biomedical & Pathological Conditions: 350
- Research & Drug Discovery Infrastructure: 300
- Projects Aimed at the Advancement of Medical Technology & Standard of Care: 300
- Other: 7%

Total: 2,300 projects

We are working on approximately 2,300 projects in total. The project breakdown is shown here.

2016/17 DATA
International Activities

I. International Cooperation in Medical R&D Fields

- Promote international collaborative research projects
- Establish 3 overseas offices, Sign MOC and Join to international consortium

II. Promote Creativity of Young Investigators
Strategic International Collaborative Research Program (SICORP)

Ministry’s agreement

MOC

Counterpart FA

Support Proposal

Japanese researcher

Support Proposal

Counterpart researcher

• Publicly soliciting research themes, setting research fields that leverage the strengths of both countries
• Examined by both Japan and partner countries
Overseas Offices of AMED

MRC (UK)
Signed in 2017

SEIDI (Spain)
Signed in 2017

MOH (Lithuania)
Signed in 2017

NIH (US)
Signed in 2016

London Office

Singapore Office
A*STAR (Singapore)
Signed in 2016

MOC Research Program

IRDiRC
GACD
GL-PID-R
HIROs

jpiamr
CDISC
Global Alliance for Genomics & Health
IHEC
International Activities

I. International Cooperation in Medical R&D Fields

II. Promote Creativity of Young Investigators

• Expand the number of programs for young investigators
• Interstellar Initiative
## Expand the number of programs for young investigators

<table>
<thead>
<tr>
<th>Application/Acceptance</th>
<th>FY2016</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of application</td>
<td>2,741</td>
<td>3,762</td>
</tr>
<tr>
<td>Programs for young investigators</td>
<td><strong>44</strong></td>
<td><strong>490</strong> (11.1 times)</td>
</tr>
<tr>
<td>Total number of acceptance</td>
<td>515</td>
<td>796</td>
</tr>
<tr>
<td>(Acceptance rate)</td>
<td>(18.8% (515/2,741))</td>
<td>(21.2% (796/3,762))</td>
</tr>
<tr>
<td>Programs for young investigators</td>
<td><strong>18</strong></td>
<td><strong>81</strong> (4.5 times)</td>
</tr>
<tr>
<td>(Acceptance rate)</td>
<td>(40.9% (18/44))</td>
<td>(16.5% (81/490))</td>
</tr>
</tbody>
</table>

### Supporting programs (including programs newly adopted and being continued from previous year)

<table>
<thead>
<tr>
<th></th>
<th>FY2016</th>
<th>FY2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of programs</td>
<td>1,950</td>
<td>2,246</td>
</tr>
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<td>Programs for young investigators</td>
<td><strong>39</strong></td>
<td><strong>98</strong> (2.5 times)</td>
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※※young investigators: “men under 39 years old, women under 45 years old”, “under 39 years old”, “under 45 years old” and so on
Interstellar Initiative

Mentor

- Invite world's outstanding investigators from various research field to enhance ECI's interdisciplinary discussion.
- Show defensed research question to ECIs.

Guide

ECIs

- Recruit promising researchers worldwide by open application.
  (Eligibility: Have obtained their last doctoral degree within the past 10 years, etc)
- Finalize research proposal under Mentor's guide and submit it to international research grant.
- Team of three researchers, including one Japanese.

Note: Described discipline is examples.

Workshop-1

Research plan will be developed by ECIs, guided by mentors

Team receives funding to enhance their proposal

Workshop-2

Research plan will be refined

Teams submit their research proposals to International funding agencies (HFSP, Horizon 2020 etc.)
Human Frontier Science Program (HFSP) is an international program proposed by former Prime Minister Nakasone of Japan at the 1987 G7 summit in Venice. The Program promotes ambitious frontier research into the complex mechanisms of living organisms. Japan provides financial support to the Program. Japanese financial contributions, which are financed by the Ministry of Education, Culture, Sports, Science and Technology (MEXT) and the Ministry of Economy, Trade and Industry (METI), are provided by AMED. In 2019, HFSP celebrates its 30th anniversary in Japan.

Number of Research Grants awardee

Number of scientists: 4,004
Number of teams: 1,090

Number of fellowships awardee

Number of postdoctoral researchers: 3,182
Long-Term Fellowships: 3,053
Cross-Disciplinary Fellowships: 129

Cumulative total contributions (FY2013～FY2017)

- Singapore
- Norway
- India
- NZ
- Australia
- Germany
- France
- USA
- Japan
- Canada
- Switzerland
- UK
- EU
- Italy
- Korea
- China
- Japan
Thank you for your attention